IN THE SPECIFICATION

Page 14, the second full paragraph, lines 14 to 22, replace the paragraph with:

First, differences from the embodiment of Fig. 1 of the integrated thin film head illustrated in Fig. 5 are that length d of the lower shield layer is longer than the length e of the lead layer and that an additional protective layer ~~of lower readgap~~ 12 is provided between the lower readgap layer 7 and the lower shield layer 4. This additional protective layer ~~of lower readgap~~ 12 is formed of a non-magnetic layer of alumina, SiO_2 or SiC, etc. and it is formed at the part except for the area under the MR sensor layer 1.

Pages 14 and 15, the paragraph bridging these pages from page 14, line 23 to page 15, line 4, replace the bridging paragraph with:

The thin film head structured as explained above can prevent generation of a short-circuit, on the occasion of forming the upper lead layer 3, between the lower shield layer 4 and upper lead layer 3 by compensating for thickness of the lower readgap layer 7 that has become thinner due to the ion milling, etc. Here, the additional protective layer ~~of lower readgap~~ 12 may be formed on the lower readgap layer.

Page 15, the first full paragraph, lines 5 to 18, replace the paragraph with:

In this thin film head manufacturing method, as illustrated in Fig. 8, the lower shield layer 4 of Permalloy or the like is formed, as illustrated in Fig. 8(A), with the plating, sputtering or etching with ion milling method, etc. on the undercoat layer 11 of alumina or the like formed on the substrate, subsequently the alumina, etc. is deposited to the whole surface and the surface is polished and is then flattened with lapping or the like, the non-conductive filler material 41 is formed with the upper surface thereof almost in matching with the upper surface of the lower shield layer 4, the non-magnetic additional protective layer ~~of lower readgap~~ 12 such as alumina, SiO_2, SiC or the like is formed thereon and moreover the lower readgap layer 7 of alumina, SiO_2, SiC or the like is formed by the sputtering method.

Page 16, the first full paragraph, lines 11 to 17, replace the paragraph with:

In the manufacturing method of this embodiment, as explained above, thickness c of the lead layer 2 is reduced to

lower the stepped level difference (c-a) in order to prevent generation of short-circuit between the lead layer 2 and the upper lead layer 3 and the upper shield layer 5, and ~~also prevent~~ the additional protective layer 12 prevents generation of short-circuit ~~with~~ between the lead layer 2 and the upper lead layer 3 and the lower shield layer ~~with the additional protective layer of lower readgap 13~~ 4.

Pages 16 and 17, the paragraph bridging these pages from page 16, line 21 to page 17, line 4, replace the bridging paragraph with:

Difference of the thin film head of this embodiment from the embodiment of Fig. 1 is that an additional protective layer ~~of upper readgap~~ 13 is provided between the upper readgap layer 6 and the upper shield layer 5. This additional protective layer ~~of upper readgap~~ 13 is a non-magnetic layer of alumina, SiO2, SiC or the like. The edge of the additional protective layer of ~~upper readgap~~ 13 is located in the side of MR sensor layer 1 than the upper lead layer 3 but is not riding over the MR sensor layer 1.

Page 17, the first full paragraph, lines 5 to 18, replace the paragraph with:

The reason why the additional protective layer ~~of upper readgap~~ is provided is thought to eliminate the events that if the upper lead layer 3 is provided closely toward the MR sensor layer 1 in order to make small the stepped level difference c-a of the upper lead layer and also make small an electric resistance between the external lead pinouts as in the case of the embodiment explained above, stepped level difference resulting from the thickness of the upper lead layer 3 and lead layer 2 becomes large, thereby the deposition property of the readgap layer 6 is lowered, and a short-circuit between the upper shield layer 5 and upper lead layer 3 is susceptible to occurrence. The additional protective layer ~~of upper readgap~~ 13 may also be formed under the upper readgap layer 6 and in this case, the identical effect can also be attained.

Page 17, the second full paragraph, lines 19 to 24, replace the paragraph with:

The thin film head of this embodiment can prevent short-circuit of the upper shield layer by reducing the stepped level difference c-a of the upper lead layer 3 and moreover reduces an electric resistance when the size f is reduced, and ~~also~~ the upper additional protective layer 13 prevents

generation of short-circuit ~~of~~ between the upper ~~shield layer 5~~ lead layer 3 and ~~upper lead layer 3 with the additional protective layer of upper readgap 13~~ the upper shield layer 5.

Pages 18 and 19, the paragraph bridging these pages from page 18, line 21 to page 19, line 6, replace the bridging paragraph with:

Next, in this manufacturing method, as illustrated in Fig. 9(E), after the upper lead layer 3 consisting of Au, Cu or the like is deposited to the whole surface, the lift-off profile photoresist pattern 31 is removed, the upper lead layer 3 is formed only to the aperture 32 as illustrated in Fig. 9(F), the upper readgap layer 6 is formed on the upper lead layer 3 as illustrated in Fig. 9(G), the non-magnetic additional protective layer ~~of upper readgap~~ 13 of alumina, SiO2, SiC or the like that is the characteristic of this embodiment is formed, and moreover the upper shield layer 5 and inductive head element for data write are formed in view of manufacturing the thin film head.

Page 19, the first full paragraph, lines 7 to 20, replace the paragraph with:

Moreover, the integrated thin film head of the other embodiment and method of manufacturing the same head will be explained with reference to Fig. 7. Difference of thin film head from the embodiment of Fig. 1 is that both additional protective layer ~~of upper readgap~~ 13 and the additional protective layer ~~of lower readgap~~ 12 are provided. This thin film head can prevent the short- circuit with the lower shield layer when thickness c of the lead layer 2 is reduced to make small the stepped level difference (c-a) and the short-circuit with the upper shield layer 5 when the upper lead layer 3 is provided near toward the MR sensor layer 1 in order to reduce the electric resistance that are characteristic of this embodiment by providing the additional protective layers of upper and lower readgaps explained above.

Pages 19 and 20, the paragraph bridging these pages from page 19, line 21 to page 20, line 15, replace the bridging paragraph with:

This thin film head manufacturing method manufactures a thin film magnetic head, as illustrated in Fig. 10(A) by forming the lower shield layer 4 of Permalloy with the plating, sputtering or etching with ion milling, etc. on the undercoat layer 11 of alumina or the like formed on the

substrate, subsequently depositing alumina to the whole surface and then polishing the surface and flattening the surface with lapping or the like and thereafter forming a non-conductive filler material 41 almost in matching in the surface thereof with the upper surface of the lower shield layer 4, then forming thereon the non-magnetic additional protective layer ~~of lower readgap~~ 12 of alumina, SiO_2, SiC or the like as the characteristic of the embodiment, moreover forming the lower readgap layer 7 of alumina, SiO_2, SiC or the like with the sputtering method, forming the upper readgap layer 6 on the upper lead layer 3, etc. with the processes B to F of the manufacturing method explained above, then forming the non-magnetic additional protective layer ~~of upper readgap~~ 13 of alumina, SiO_2, SiC or the like as the characteristic of the embodiment and moreover forming the upper shield layer 5 and the inductive head element for writing data.